

In the Claims:

1. (Currently amended) A semiconductor laser device comprising:
an optically pumped surface-emitting vertical emitter region $[(2)]$ which has an active radiation-emitting vertical emitter layer; $[(3)]$ ~~and~~
at least one monolithically integrated pump radiation source $[(5)]$ for optically pumping the vertical emitter $[(2)]$, which has an active radiation-emitting pump layer $[(6)]$, ~~characterized in that~~ wherein the pump layer $[(6)]$ follows the vertical emitter layer $[(3)]$ in the vertical direction; $[,]$
a conductive layer ~~(13)~~ is provided between the vertical emitter layer $[(3)]$ and the pump layer; and $[(6),]$
a contact ~~(9)~~ is applied on the side of the semiconductor layer device which is closer to the pump layer $[(6)]$ than to the conductive layer; ~~(13), and~~
whereby an electrical field can be applied between the conductive layer $[(13)]$ and the contact $[(9)]$ for generating pump radiation $[(7)]$ by charge carrier injection.
2. (Currently amended) The semiconductor laser device as claimed in claim 1, ~~characterized in that~~ wherein the semiconductor laser device is partially ablated so that the conductive layer (13) is partially exposed.
3. (Currently amended) The semiconductor laser device as claimed in claim 2, ~~characterized in that~~ wherein the semiconductor laser device is ablated in the form of parallel trenches ~~(22)~~.

4. (Currently amended) The semiconductor laser device as claimed in claim 2 ~~or 3~~, ~~characterized in that~~, wherein a further contact $[(15)]$ is applied to the exposed areas of the conductive layer $[(13)]$.

5. (Currently amended) The semiconductor laser device as claimed in claim 4, ~~characterized in that~~ wherein a layer $[(14)]$ which is conductive and which is transparent for radiation of a wavelength as generated by the ~~vertical emitter region (2)~~ is pump radiation source provided between a conductive layer $[(13)]$ and the further contact $[(15)]$.

6. (Currently amended) The semiconductor laser device as claimed in claim 2, wherein ~~one of claims 2 to 5, characterized in that~~, an etch stop layer $[(17)]$ which is resistant to an etching process which is suitable for exposing the conductive layer $[(13)]$ is provided adjacently to the conductive layer $[(13)]$.

7. (Currently amended) The semiconductor laser device as claimed in claim 1, wherein ~~one of claims 1 to 6, characterized in that~~ the conductive layer $[(13)]$ is arranged vertically in such a manner that it is located in a node of the radiation field in the resonator of the vertical emitter region $[(2)]$.

8. (Currently amended) The semiconductor laser device as claimed in claim 1, wherein ~~one of claims 1 to 7, characterized in that~~ a vertical waveguide structure $[(16)]$ is provided between the vertical emitter layer $[(3)]$ and the conductive layer $[(13)]$.

9. (Currently amended) The semiconductor laser device as claimed in claim 8, ~~characterized in that~~ wherein the vertical waveguide structure $[(16)]$ has other optical characteristics in the region in which it is located between the contact $[(9)]$ and the further contact $[(15)]$, seen laterally, than in the region in which it is not located between the contact $[(9)]$ and the further contact $[(15)]$.

10. (Currently amended) The semiconductor laser device as claimed in claim 9, ~~characterized in that~~ wherein $[,]$ the vertical waveguide structure $[(16)]$ is oxidized in the region in which it is located between the contact $[(9)]$ and the further contact $[(15)]$, seen laterally.

11. (Currently amended) The semiconductor laser device as claimed in claim 1, wherein ~~one of claims 1 to 10, characterized in that~~ the pump layer $[(6)]$ and the vertical emitter layer $[(3)]$ are followed in the vertical direction by an internal cavity reflective structure.

12. (Currently amended) The semiconductor laser device as claimed in claim 11, ~~characterized in that~~ wherein the internal cavity reflective structure is a Bragg reflector structure $[(10)]$.

13. (Currently amended) The semiconductor laser device as claimed in claim 11, wherein ~~one of claims 11 or 12, characterized in that~~ the internal cavity reflective structure is arranged between the vertical emitter layer $[(3)]$ and a substrate $[(8)]$ and the radiation generated by the vertical emitter layer $[(3)]$ is launched on the side opposite the substrate.

14. (Currently amended) The semiconductor laser device as claimed in claim 1, ~~wherein one of claims 1 to 13, characterized in that~~ the vertical emitter layer ~~[[3]]~~ is associated with an external resonator reflector ~~[[19]]~~ which, together with the internal cavity reflective structure, forms the resonator for the vertical emitter region ~~[[2]]~~.

15. (Currently amended) The semiconductor laser device as claimed in claim 14, ~~characterized in that~~ wherein beam-shaping elements are arranged in the resonator.

16. (Currently amended) The semiconductor laser device as claimed in claim 14, ~~wherein one of claims 14 or 15, characterized in that~~ frequency-selective elements are arranged in the resonator.

17. (Currently amended) The semiconductor laser device as claimed in claim 14, ~~wherein one of claims 14 to 16, characterized in that~~ frequency-converting elements are arranged in the resonator.

18. (Currently amended) The semiconductor laser device as claimed in claim 1, ~~wherein one of claims 1 to 17, characterized in that~~ the vertical emitter layer ~~[[3]]~~ and/or the pump layer ~~[[6]]~~ in each case have one or more quantum well structures.

19. (Currently amended) The semiconductor laser device as claimed in claim 18,
wherein ~~14, characterized in that~~ the quantum well structures can contain quantum troughs,
quantum wires, quantum dots and any combination of these structures.